

REMARKS/ARGUMENTS

Examiner has not demanded any corrections or amendments to the specifications nor to the drawings, wherefore I have made them only to the claims.

Claim Objections:

I have corrected the informalities pointed out in detail and in general by the examiner.

Claim Rejections - 35 USC paragraph 112:

I have done to the best of my ability to clarify the subject matter which I regard as my invention in the claims 1 - 9. Examiner writes on page 3 line 9 "In lines 56, applicant claims...", obviously meaning lines 5- 6, as I have interpreted that point. Examiner asks if applicant intends the currents on the lines 5 - 6 and 14 to be the same. The answer is yes, and I have clarified the text accordingly.

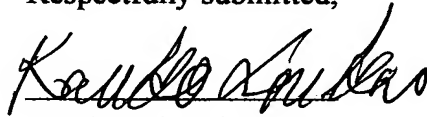
Claim Rejections - 35 USC paragraph 102:

Politely said, I cannot agree with the examiner in that inventor Futa [US 5,410,289] had anticipated my invention. My arguments are as follows:

- If concerning the notions used by Futa, as spiral, coil, insulator, magnetic, strip, conducting, housing etc. I have to point out that those are general words used again and again in applications as well as other texts. But, I suppose that examiner is mentioning them as an introduction for the next.
- When concerning the contents of the inventions of Futa and mine, it is clear that my invention is inherently of different kind. Futa's invention is a lifting magnet that uses direct current, not alternating current, although that fact has not been mentioned in the specifications nor in the claims.
- The lifting magnets can not use any alternating current because of the eddy currents that any alternating current led into its coil would induce in its metal parts, causing strong vibration, whirring sound, and loss of most of its lifting force. If someone, not knowing that technology, argues that this or that lifting magnet really uses AC from a public source, that means that it is rectified to DC before led to the lifting magnet. In the Internet can be found articles of this subject, e.g. in Tooling University an article "Why Lifting Magnets Are Attractive" by John Mackowsky/ Eriez Magnetics. Meaning lifting magnets he states on page 3: "Given that magnets operate on DC, a combination AC to DC rectifier and magnet controller is mounted on the crane. This device converts the crane power from AC to DC and turns the magnet on and off." My invention uses mostly AC, and DC is used only for pre-magnetization in some applications, and my invention is not a lifting magnet, its structure not allowing lifting, but an electric component with properties of both a capacitor and an inductor.

- The invention of Futa can not function as a capacitor-inductor for following reasons: Futa's device is only an inductor, not having a property of a capacitor. In the Detailed Description of the Preferred Embodiments of his application he writes in paragraph 18: "An external power supply provides electrical current to electromagnet 10. ... Terminal 70 is connected to electrical conductor strip 56 adjacent its innermost point. Terminal 72 is likewise positioned through an opening in housing 20, and is connected to electrical conductor strip 56 adjacent its outermost point. Both terminals connected to a suitable source of electricity..." This citation proves that Futa's invention has only one conductor strip 56, the terminals 70 and 72 are connected on its innermost and uttermost points, and both terminals are connected to a source of electricity. The magnetic strip 54 does not have any electric current, except perhaps a reasonably little side current because the magnetic strip is placed adjacent the electrical conductor strip, only creating the strong magnetic flux needed by enhancing the permeability of the coil. Everyone familiar with elementary electricity knows that **a capacitor needs at least two conducting plates or strips with an insulation or air gap between them and an electric source connected, not on the ends of a same plate or strip, as in Futa's invention, but on those two separate plates or strips, and that any direct current can not go through a capacitor but an alternating or pulsating current.** So, it is impossible that Futa's invention, as it has been patented, could function as capacitor-inductor, and it can not be proved that Futa had anticipated any capacitor-inductor. His invention can be used only as an inductor, not as a capacitor, let alone that it could be used as a capacitor-inductor which is my invention.

Respectfully submitted,



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